

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (original): A variable gain amplifier circuit comprising:

a plurality of common-emitter amplifier circuits which are different in voltage gain and employ bipolar transistors and

switch means for selecting the plurality of amplifier circuits, wherein:

the bases of the bipolar transistors are connected in common with each other; and the switch means are connected to the respective emitter sides of the bipolar transistors.

Claim 2 (original): A variable gain amplifier circuit comprising:

a plurality of amplifier circuits which are different in voltage gain and employ bipolar transistors and formed with an common-emitter and common-base cascade connection and

switch means for selecting the plurality of amplifier circuits, wherein:

the bases of the common-emitter bipolar transistors are connected in common with each other; and the switch means are connected to the respective emitter sides of the bipolar transistors.

Claim 3 (original): The variable gain amplifier circuit as claimed in either claim 1 or claim 2, wherein a collector current ratio between the plurality of amplifier circuits is inversely proportional to an emitter degeneration resistance ratio.

Claim 4 (currently amended): The variable gain amplifier circuit as claimed in ~~one of~~
~~claims 1 to 3~~ claim 3, wherein an emitter area ratio between common-emitter transistors
in the plurality of amplifier circuits is inversely proportional to the emitter degeneration
resistance ratio.

Claim 5 (currently amended): The variable gain amplifier circuit as claimed in ~~one of~~
~~claims 1 to 4~~ claim 4, wherein the emitter area ratio between the common-emitter
transistors in the plurality of amplifier circuits is in powers of 2.

Claim 6 (currently amended): The variable gain amplifier circuit as claimed in ~~one of~~
~~claims 1 to 5~~ claim 4, wherein the emitter degeneration resistance ratio between the
plurality of amplifier circuits is in powers of 2.

Claim 7 (original): The variable gain amplifier circuit comprising:

a plurality of common-source amplifier circuits which are different in voltage gain
and employ field effect transistors and

switch means for selecting the plurality of amplifier circuits, wherein:

the gates of the field effect transistors are connected in common with each other;
and the switch means are connected to the respective source sides of the field effect
transistors.

Claim 8 (original): A variable gain amplifier circuit comprising:

a plurality of amplifier circuits which are different in voltage gain and employ bipolar transistors and formed with a common-source and common-gate cascade connection and

switch means for selecting the plurality of amplifier circuits, wherein:

the gates of the common-source field effect transistors are connected in common with each other; and the switch means are connected to the respective source sides of the field effect transistors.

Claim 9 (original): The variable gain amplifier circuit as claimed in either claim 7 or claim 8, wherein a drain current ratio between the plurality of amplifier circuits is inversely proportional to a source degeneration resistance ratio.

Claim 10 (currently amended): The variable gain amplifier circuit as claimed in ~~one of claims 7 to 9~~ claim 7, wherein a gate width ratio between common-source transistors in the plurality of amplifier circuits is inversely proportional to the source degeneration resistance ratio.

Claim 11 (currently amended): The variable gain amplifier circuit as claimed in ~~one of claims 7 to 10~~ claim 10, wherein the gate width ratio between the common-source transistors in the plurality of amplifier circuits is in powers of 2.

Claim 12 (currently amended): The variable gain amplifier circuit as claimed in ~~one of~~
~~claims 7 to 11~~ claim 11, wherein the source degeneration resistance ratio between the
plurality of amplifier circuits is in powers of 2.

Claim 13 (currently amended): The variable gain amplifier circuit as claimed in ~~one of~~
~~claims 1 to 12~~ claim 1, wherein the switch means is a current source.

Claim 14 (currently amended): The variable gain amplifier circuit as claimed in ~~one of~~
~~claims 1 to 12~~ claim 1, wherein the switch means is a transistor.

Claim 15 (currently amended): The variable gain amplifier circuit as claimed in ~~one of~~
~~claims 1 to 12~~ claim 1, wherein the switch means is an inverter.

Claim 16 (currently amended): The variable gain amplifier circuit as claimed in ~~one of~~
~~claims 1 to 15~~ claim 2, having bias circuits respectively corresponding to the plurality of
amplifier circuits.

Claim 17 (currently amended): The variable gain amplifier circuit as claimed in ~~one of~~
~~claims 1 to 16~~ claim 2, having a decoder as decoding means for receiving and decoding
a digital signal and selecting any one of the plurality of amplifier circuits by its output
corresponding to the digital signal received.

Claim 18 (currently amended): The variable gain amplifier circuit as claimed in ~~one of~~
~~claims 1 to 16~~ claim 17, having a decoder as decoding means for receiving and decoding

a digital signal and selecting any combination of amplifier circuits by its output corresponding to the digital signal received.

Claim 19 (currently amended): The variable gain amplifier circuit as claimed in ~~one of claims 1 to 16~~ claim 17, having decoding means for receiving and decoding a digital signal, including a first decoder for selecting one of the plurality of amplifier circuits by its output corresponding to the digital signal received and a second decoder for selecting any combination of amplifier circuits by its output corresponding to the digital signal received.

Claim 20 (currently amended): The radio communication apparatus having the variable gain amplifier circuit as claimed in ~~one of claims 1 to 19~~ claim 1 as an amplifier circuit.